



1/16/2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

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OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JAN 16 2015

James L. Kunstman, Ph.D.  
Vice President, Regulatory Services  
PBI/Gordon Corporation  
Post Office Box 014090  
Kansas City, Missouri 64101

Subject: Label Notification per PRN 98-10 – Limit the use of this product for goosegrass in California by adding the wording “Not for use in California” to the label.  
Product Name: Speed Zone St. Augustine Formula Broadleaf Herbicide  
EPA Registration Number: 2217-835  
Application Date: December 8, 2014  
Decision Number: 498420

Dear Dr. Kunstman:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

If you have any questions, you may contact Karen Samek at (703) 347-8825 or via email at samek.karen@epa.gov.

Sincerely,

Kathryn Montague, Product Manager 23  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs



Label Language Common to All Sublabels

SPEED ZONE ST. AUGUSTINE FORMULA BROADLEAF HERBICIDE

NOTIFICATION

JAN 16 2015

EPA Reg. No. 2217-835

Table with 2 columns: Ingredient Name and Percentage. Includes Active Ingredients (2,4-D, Mecoprop-p acid, Dicamba acid, Carfentrazone-ethyl) and Other Ingredients (85.64%), totaling 100.00%.

- THIS PRODUCT CONTAINS: 0.52 lb 2,4-dichlorophenoxyacetic acid equivalent per gallon or 6.96%. 0.20 lb (+)-R-2-(2-methyl-4-chlorophenoxy)propionic acid equivalent per gallon or 2.66%. 0.05 lb 3,6-dichloro-o-anisic acid equivalent per gallon or 0.67%. 0.04 lb Ethyl alpha,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.54%

Contains Petroleum Distillate. Isomer Specific by AOAC Methods. TRIMEC® is a registered trademark of PBI/Gordon Corporation.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

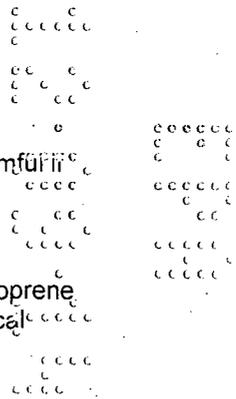
PRECAUTIONARY STATEMENTS

Hazards to Human and Domestic Animals

CAUTION: Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are barrier laminate, nitrile rubber, neoprene rubber or Viton. If you want more options, follow the instructions for category E on a EPA chemical resistance category selection chart.



All mixers, loaders, applicators, flaggers, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical resistant gloves,
- chemical resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

**User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements**

Containers over 1 gallon and less than 5 gallons: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Containers of 5 or more gallons: Do not open-pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

<b>User Safety Recommendations</b>	
•	Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
•	Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
•	Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

<b>First Aid</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>



6/32

application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For Plastic Containers – Nonrefillable with capacities greater than 5 gallons:]**

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

[OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For Refillable Containers:]**

**CONTAINER HANDLING:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Container cleaning: Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in *Washington Toxics Coalition. et al. v. EPA*, C01-0132C, (W.D. WA). For further information, please refer to EPA Web Site: <http://www.epa.gov/espp>.

**LIMITED WARRANTY AND DISCLAIMER**

FOR USE ONLY AS DIRECTED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. If these terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full. The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere.

## SUBLABEL 1

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants,
- Chemical-resistant footwear plus socks,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant headgear for overhead exposure, and
- Protective eyewear.

#### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Reentry Statement:** Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

#### **PRODUCT DESCRIPTION:**

SpeedZone St. Augustine Formula Broadleaf Herbicide contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production.

SpeedZone St. Augustine Formula Broadleaf Herbicide offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool season turfgrass and warm season turfgrasses.
- Good toxicological, environmental, and ecological properties compared to the standards.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.

- Fast acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7 to 14 days.

**SPRAY PREPARATION AND TANK MIXTURES:**

SpeedZone St. Augustine Formula Broadleaf Herbicide is an emulsifiable concentrate or an ester formulation intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

**Water as diluent:**

Add one-half the required amount of water to the spray tank, then add SpeedZone St. Augustine Formula Broadleaf Herbicide slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture. Storage of the spray mixture beyond 72 hours is not recommended.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

**Adjuvants and spray additives:**

Adjuvants include surfactants, spreaders, spreader-stickers, spray thickeners, foaming agents, activators, detergents, and drift reducing agents. All additives change the physical and biological properties of the spray solution.

SpeedZone St. Augustine Formula Broadleaf Herbicide is a solvent based emulsifiable concentrate designed for rapid penetration and uptake. Adjuvant(s) mixed with this product are seldom synergistic, often antagonistic, and have no significant influence on efficacy.

Certain adjuvants combined with this product can damage the leaf tissue of turfgrass. If any discoloration or cosmetic effects are objectionable or any level of phytotoxicity would be unacceptable, then adjuvant(s) combined with SpeedZone St. Augustine Formula Broadleaf Herbicide would not be recommended.

**Liquid fertilizers as diluents:**

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (eg. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

**GROUND EQUIPMENT:**

Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. Do not use flood nozzles, Raindrop®, or nozzle tips larger than 8008. Spray droplets larger than 400 microns may reduce coverage and subsequent loss in weed control.

Spray volumes of 3 to 175 gallons per acre with spray pressures adjusted to 20 to 40 psi are appropriate. Use higher spray volumes for dense weed populations.

Hand operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical.



- Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways, aprons, and roughs) , and office buildings.
- Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, and areas adjacent to athletic fields.
- Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- Agricultural site: Commercial sod production
- Noncropland Sites: Highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians. Municipal, state, and federal lands: Airports and military installations.

**Prohibitions of Sites:**

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

**Turfgrass tolerance:**

- The turfgrass tolerance to SpeedZone St. Augustine Formula Broadleaf Herbicide may vary and temporary turfgrass yellowing may occur on St. Augustinegrass and certain varieties (F1) hybrids of hybrid bermudagrass. SpeedZone St. Augustine Formula Broadleaf Herbicide may injure certain turfgrass species. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

These cool season and warm season turfgrass species may be treated:

**Cool Season Turf**

- Kentucky bluegrass
- Annual bluegrass
- Annual ryegrass
- Perennial ryegrass
- Tall fescue
- Red or fine leaf fescues
- Creeping bentgrass
- Colonial bentgrass
- Mixtures of cool season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass, and orchardgrass)

**Warm Season Turf**

- Common bermudagrass
- Hybrid bermudagrass
- Bahiagrass
- Zoysiagrass
- Buffalograss
- St. Augustinegrass
- Centipedegrass
- Seashore paspalum
- Kikuyugrass

**Prohibitions:**

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not broadcast apply this product when ambient temperatures are below 50°F or above 90°F.
- Do not apply this product to St. Augustinegrass during spring green-up which is the transition period between dormancy and active growth.
- Do not apply this product to St. Augustinegrass during the fall to winter transition if temperatures are expected to drop below 40°F within ten (10) days of application.

**APPLICATION SCHEDULES:**

Early postemergent applications of SpeedZone St. Augustine Formula Broadleaf Herbicide are recommended for annual, biennial, and perennial weeds. Apply SpeedZone St. Augustine Formula Broadleaf Herbicide to broadleaf weeds that are young and actively growing for the best results. SpeedZone St. Augustine Formula Broadleaf Herbicide combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

SpeedZone St. Augustine Formula Broadleaf Herbicide may be applied as a single broadcast application or as a split/sequential broadcast applications in the spring, summer, or fall. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective.

Sequential broadcast applications or follow-up applications as spot treatments with a minimum 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of SpeedZone St. Augustine Formula Broadleaf Herbicide. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to SpeedZone St. Augustine Formula Broadleaf Herbicide.

**For newly seeded areas:**

The application of SpeedZone St. Augustine Formula Broadleaf Herbicide to grass seedlings is recommended after the second mowing.

**For newly sodded, sprigged, or plugged areas:**

The application of SpeedZone St. Augustine Formula Broadleaf Herbicide to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

**For dormant turf:**

Applications to dormant bermudagrass, dormant zoysiagrass, and dormant bahiagrass are suggested.

**Prohibitions for application schedules:**

- Do not broadcast apply when air temperatures exceed 90°F; some injury may be expected with spot treatments when air temperatures exceed 90°F.

**HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES FOR TURFGRASS:**

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense

infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Do not apply more than 2 broadcast treatments per season. A minimum of 30 days is required between applications.

Use rates and spray volumes of SpeedZone St. Augustine Formula Broadleaf Herbicide as broadcast treatments for use on turfgrass are presented in Table 1.

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl.oz./1,000 sq.ft.	Spray Volume Gallons per 1,000 sq.ft.
<b>Cool Season Turf</b>				
Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall fescue, Red or fine leaf fescues, Creeping bentgrass, Colonial bentgrass, Mixtures of Cool-Season species established for aesthetic purposes Mixtures of cool season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass & orchardgrass)	4 to 6	3 to 175	1.5 to 2.2	0.1 to 4.0
<b>Warm Season Turf</b>				
Common bermudagrass	3 to 5	3 to 175	1.1 to 1.8	0.1 to 4.0
Hybrid bermudagrass Bahagrass Zoysiagrass Buffalograss St. Augustinegrass Centipedegrass Seashore paspalum Kikuyugrass	2 to 4	3 to 175	0.75 to 1.5	0.1 to 4.0
NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone St. Augustine Formula Broadleaf Herbicide are not recommended.				

Use Site	Maximum Rate per Application	Maximum Number of Applications per Year	Minimum Interval Between Applications	Minimum Spray Volume	Maximum seasonal rate
Ornamental turfgrass	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	30 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)
Sod farms	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	21 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)
ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 12 pints (0.8 lb 2,4-D ae) per acre per season, excluding spot treatments.					

**SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):**

- Do not apply more than 2 spot treatments per season. A minimum of 30 days is required between applications.
- For cool season turfgrass, mix 1.5 to 2.2 fl.oz. SpeedZone St. Augustine Formula Broadleaf Herbicide per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.
- For warm season turfgrass, mix 0.75 to 1.5 fl.oz. SpeedZone St. Augustine Formula Broadleaf Herbicide per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.

SpeedZone St. Augustine Formula Broadleaf Herbicide may be tank mixed with other herbicides EPA-registered for use on turfgrass to broaden the weed control spectrum compared to the products alone. These tank mixtures must be used according to the most restrictive label limitations and precautions. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

**CULTURAL TIPS FOR IMPROVED CONTROL:**

**Irrigation:**

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Do not irrigate or water the turfgrass within 24 hours after application.

**Mowing:**

- Delay mowing 1 to 2 days before and after the application of this product.

**Reseeding interval:**

- Treated areas may be reseeded 2 weeks after application.

**BROADLEAF WEEDS CONTROLLED:**

SpeedZone St. Augustine Formula Broadleaf Herbicide will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to 2,4-D.

BROADLEAF WEEDS			
Aster, white heath & white prairie	Dock	Lambsquarters	Redweed
Bedstraw	Dogfennel	Lawn burweed	Red sorrel (*sheep sorrel)
Beggarweed, creeping	English daisy	Lespedeza, common	Shepherdspurse
Bindweed	False dandelion (*spotted catsear & common catsear)	Mallow, common	Spotted spurge
Black medic	Field bindweed	Matchweed	Spurge
Broadleaf plantain	(*morningglory & creeping jenny)	Mouseear chickweed	Thistle
Buckhorn plantain	Field oxeye-daisy (*creeping oxeye)	Old world diamond flower	Veronica (*corn speedwell)
Bull thistle	Filaree, whitestem & redstem	Oxalis (*yellow woodsorrel & creeping woodsorrel)	Virginia buttonweed
Burclover	Florida betony	Parsley-piert	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Burdock, common	Florida pusley	Pennsylvania smartweed	Wild carrot
Buttercup, creeping	Ground ivy	Pepperweed	Wild garlic
Carpetweed	Groundsel	Pigweed	Wild geranium
Chickweed, common	Hawkweed	Pineappleweed	Wild lettuce
Chicory	Healall	Plantain	Wild mustard
Cinquefoil	Henbit	Poison ivy	Wild onion
Clover	Innocence (Blue-eyed Mary)	Poison oak	Wild strawberry
Compassplant		Prostrate knotweed (*)	Wild violet
Curly dock		Puncturevine	Yarrow
Dandelion		Purple cudweed	Yellow rocket
Dayflower		Purslane	
Deadnettle		Ragweed	
*Synonyms			



15/  
32

## SUBLABEL 2

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants,
- Chemical-resistant footwear plus socks,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant headgear for overhead exposure, and
- Protective eyewear.

#### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Reentry Statement:** Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

#### **PRODUCT DESCRIPTION:**

SpeedZone St. Augustine Formula Broadleaf Herbicide contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production.

SpeedZone St. Augustine Formula Broadleaf Herbicide offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool season turfgrass and most warm season turfgrass.
- Good toxicological, environmental, and ecological properties compared to the standards.

- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7 to 14 days.

**SPRAY PREPARATION AND TANK MIXTURES:**

SpeedZone St. Augustine Formula Broadleaf Herbicide is an emulsifiable concentrate or an ester formulation intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

**Water as diluent:**

Add one-half the required amount of water to the spray tank, then add SpeedZone St. Augustine Formula Broadleaf Herbicide slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture. Storage of the spray mixture beyond 72 hours is not recommended.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

**Adjuvants and spray additives:**

Adjuvants include surfactants, spreaders, spreader-stickers, spray thickeners, foaming agents, activators, detergents, and drift reducing agents. All additives change the physical and biological properties of the spray solution.

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**Liquid fertilizers as diluents:**

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (eg. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

**GROUND EQUIPMENT:**

Spray distribution: The accuracy and uniformity of the herbicide application is the sole responsibility of the applicator. Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications.

Spray volumes of 3 to 220 gallons per acre (except when applying this product to St. Augustinegrass, use spray volumes of 40 to 220 gallons per acre) with spray pressures adjusted to 20 to 40 psi are appropriate.

Use higher spray volumes for dense weed populations.

- Calibration and proper application are essential when using this product.
- Over-application or rates above those recommended on this label can cause turf injury.
- Hand-held technique: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the nozzle should be held stationary at the proper height. Side-to-side motion results in uneven coverage.

Hand operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical.

This product may cause injury to susceptible/nontarget plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Applications are recommended only when there is no potential hazard from spray drift during dormant and active growth periods.

After using this product, clean sprayer with soap or detergent and water, or an approved spray tank cleaner and rinse thoroughly before applying other pesticides.

### Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### Droplet Size

Use only medium or coarser spray nozzles according to ASAE (standard 572) definition of standard nozzles or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

#### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

**Equipment**

All ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the turf canopy.

**WHERE TO USE:**

SpeedZone St. Augustine Formula Broadleaf Herbicide provides selective broadleaf control in warm season and cool season turfgrass in five (5) use sites.

- Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways, aprons, and roughs) , and office buildings.
- Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, and areas adjacent to athletic fields.
- Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- Agricultural site: Commercial sod production
- Noncropland Sites: Highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians. Municipal, state, and federal lands: Airports and military installations.

**Prohibitions of Sites:**

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

**Turfgrass tolerance:**

- The turfgrass tolerance to this product may vary and temporary turfgrass yellowing may occur on St. Augustinegrass and certain varieties (F1) hybrids of hybrid bermudagrass. SpeedZone St. Augustine Formula Broadleaf Herbicide may injure certain turfgrass species. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

**Prohibitions:**

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F, some injury may be expected with spot treatments when air temperatures exceed 85°F.

**APPLICATION SCHEDULES:**

Early postemergent applications of SpeedZone St. Augustine Formula Broadleaf Herbicide are recommended for annual, biennial, and perennial weeds. Apply SpeedZone St. Augustine Formula Broadleaf Herbicide to broadleaf weeds that are young and actively growing for the best results. SpeedZone St. Augustine Formula Broadleaf Herbicide combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

SpeedZone St. Augustine Formula Broadleaf Herbicide may be applied as a single broadcast application or as a split/sequential broadcast applications in the spring, summer, or fall. Spring and fall treatments

under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective.

Sequential broadcast applications or follow-up applications as spot treatments with a minimum 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of SpeedZone St. Augustine Formula Broadleaf Herbicide. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to SpeedZone St. Augustine Formula Broadleaf Herbicide.

**For newly seeded areas:**

The application of SpeedZone St. Augustine Formula Broadleaf Herbicide to grass seedlings is recommended after the second mowing.

**For newly sodded, sprigged, or plugged areas:**

The application of SpeedZone St. Augustine Formula Broadleaf Herbicide to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

**For dormant turf:**

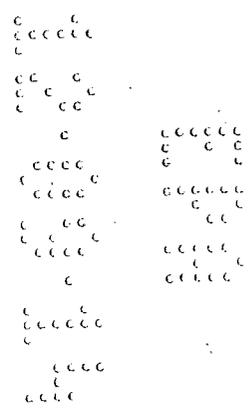
Applications to dormant bermudagrass, dormant zoysiagrass, and dormant bahiagrass are suggested.

**HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES FOR TURFGRASS:**

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Do not apply more than 2 broadcast treatments per season. A minimum of 30 days is required between applications.

Use rates and spray volumes of SpeedZone St. Augustine Formula Broadleaf Herbicide as broadcast treatments for use on turfgrass are presented in Table 1.





**TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWN AND TURFGRASS.**

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl.oz./1,000 sq.ft.	Spray Volume Gallons per 1,000 sq.ft.
<b>Warm Season Turf</b>				
<b>St. Augustinegrass (Excluding 'Floritam' and 'Bitterblue' varieties)</b> See Instructions Below:	1.5 to 4 During higher temperatures, lower rates within this range are recommended.	40 to 220	0.55 to 1.5 During higher temperatures, lower rates within this range are recommended.	1.0 to 5.0
<b>St. Augustinegrass 'Floritam' and 'Bitterblue' varieties.</b> FOR 'FLORTAM' AND 'BITTERBLUE' VARIETIES— Only broadcast this product <b>after</b> Spring green-up (after several mowings of actively growing turf) up to August 1 <sup>st</sup> for sensitive varieties of St. Augustine grasses such as 'Floritam' and 'Bitterblue'. Spot treatments after this time can cause injury. See Instructions Below:	1.5 to 4 During higher temperatures, lower rates within this range are recommended.	40 to 220	0.55 to 1.5 During higher temperatures, lower rates within this range are recommended.	1.0 to 5.0
<ul style="list-style-type: none"> <li>• Not all varieties of St. Augustinegrass have been tested.</li> <li>• Do not broadcast or spot apply this product to St. Augustinegrass during spring green-up, which is the transition period between dormancy and active growth.</li> <li>• Do not broadcast or spot apply this product to St. Augustinegrass during the fall to winter transition if temperatures are expected to drop below 40°F within ten (10) days of application</li> <li>• If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.</li> <li>• Avoid mowing 2 days before and until 2 days after the application of this product.</li> <li>• Over-application of this product can cause turf injury (discoloration, turf thinning, stunting and even turf death).</li> <li>• Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F; some injury may be expected with spot treatments when air temperatures exceed 85°F.</li> <li>• Do not use tank mixture combinations, unless your experience indicates that the tank mixture will not result in turf injury. To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of PBI/Gordon Corporation and all risk is assumed by the buyer and/or user.</li> </ul>				
<p>NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone St. Augustine Formula Broadleaf Herbicide should not be used.</p>				

**Limitations on 2,4-D applications to ornamental turfgrass and sod farms**

Use Site	Maximum Rate per Application	Maximum Number of Applications per Year	Minimum Interval Between Applications	Minimum Spray Volume	Maximum seasonal rate
Ornamental turfgrass	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	30 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)
Sod farms	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	21 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)

ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 12 pints (0.8 lb 2,4-D ae) per acre per season, excluding spot treatments.

**SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):**

- Calibration and proper application are essential when using this product.
- Over-application or rates above those recommended on this label including excessive overlaps of this product can cause turf injury.
- Uniform applications are essential when using this product.
- Hand-held techniques: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the nozzle should be held stationary at the proper height. Side-to-side motions result in uneven coverage.
- For cool season turfgrass, mix 1.5 to 2.2 fl.oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible.
- For warm season turfgrass other than St. Augustinegrass, mix 0.75 to 1.5 fl.oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. For St. Augustinegrass, higher spray volumes (more than 2 gallons/1,000 square feet) are recommended.
- Apply any time the emerged broadleaf weeds are susceptible.
- Do not apply more than 2 spot treatments per season. A minimum of 30 days is required between applications.
- Do not use tank mixture combinations, unless your experience indicates that the tank mixture is effective and will not result in turf injury. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

**CULTURAL TIPS FOR IMPROVED CONTROL:**

**Irrigation:**

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Rainfast in 3 hours. Do not irrigate or water the turfgrass within 3 hours after application. If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.

**Mowing:**

- Delay mowing 2 days before and until 2 days after the application of this product.

**Reseeding interval:**

- Treated areas may be reseeded 1 week after application.

**BROADLEAF WEEDS CONTROLLED:**

SpeedZone St. Augustine Formula Broadleaf Herbicide will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to 2,4-D.

BROADLEAF WEEDS			
Aster, white heath & white prairie	Dogfennel	Knotweed	Redweed
Bedstraw	Dollarweed (*pennywort)	Lambsquarters	Red sorrel (*sheep sorrel)
Beggarweed, creeping	English daisy	Lawn burweed	Shepherdspurse
Bindweed	False dandelion (*spotted catsear & common catsear)	Lespedeza, common	Spurge
Black medic	Field bindweed	Mallow, common	Thistle
Broadleaf plantain	(*morningglory & creeping jenny)	Matchweed	Veronica (*corn speedwell)
Buckhorn plantain	Field oxeye-daisy	Mouseear chickweed	Virginia buttonweed
Bull thistle	(*creeping oxeye)	Old world diamond flower	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Burclover	Filaree, whitestem &	Oxalis (*yellow woodsorrel & creeping woodsorrel)	Wild carrot
Burdock, common		Parsley-piert	Wild garlic
Buttercup, creeping		Pennsylvania smartweed	



**SUBLABEL 3**

**Directions for Use to be presented on the labels of retail containers under the brand name of SpeedZone Southern Broadleaf Herbicide for Turf**

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants,
- Chemical-resistant footwear plus socks;
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant headgear for overhead exposure, and
- Protective eyewear.

**Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Reentry Statement:** Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

**PRODUCT DESCRIPTION:**

SpeedZone Southern Broadleaf Herbicide for Turf contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production. Without this key enzyme, a build-up of peroxide-like compounds occur, thus causing the plant cell membranes of weeds to rupture.

SpeedZone Southern Broadleaf Herbicide for Turf offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool season turfgrass and most warm season turfgrass.
- Good toxicological, environmental, and ecological properties compared to the standards.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7 to 14 days.

**SPRAY PREPARATION:**

SpeedZone Southern Broadleaf Herbicide for Turf is an emulsifiable concentrate or an ester formulation intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

**Mixing with Water:**

Add one-half the required amount of water to the spray tank, then add SpeedZone Southern Broadleaf Herbicide for Turf slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture. Storage of the spray mixture beyond 72 hours is not recommended.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

**Mixing with Liquid Fertilizers:**

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (e.g. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

**Mixing with Adjuvants and Spray Additives:**

Adjuvants include surfactants, spreaders, spreader-stickers, spray thickeners, foaming agents, activators, detergents, and drift reducing agents. All additives change the physical and biological properties of the spray solution.

SpeedZone Southern Broadleaf Herbicide for Turf is a solvent based emulsifiable concentrate designed for rapid penetration and uptake. Adjuvant(s) mixed with this product are seldom synergistic, often antagonistic, and may have no significant influence on efficacy.

Certain adjuvants combined with this product can damage the leaf tissue of turfgrass. If any discoloration or cosmetic effects are objectionable or any level of phytotoxicity would be unacceptable, then adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf would not be recommended. Use these adjuvants, spray additives or tank-mix combinations, only when your experience indicates that the tank mixture will not result in objectionable turf injury.

**GROUND EQUIPMENT:**

Spray distribution: The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator. Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and

delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications.

Spray volumes of 3 to 220 gallons per acre (except when applying this product to St. Augustinegrass, use spray volumes of 40 to 220 gallons per acre) with spray pressures adjusted to 20 to 40 psi. are appropriate. Use higher spray volumes for dense weed populations.

- Calibration and proper application are essential when using this product.
- Avoid spray overlaps with spray equipment
- Over-application or rates above those recommended on this labeling can cause turf injury.
- Hand-held technique: Spray wands fitted with flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the flat fan nozzle should be held stationary at the proper height. Side-to-side motion results in uneven coverage. To avoid excessive spray pattern overlaps, a spray colorant may be used.

Hand operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical.

This product may cause injury to susceptible/nontarget plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Applications are recommended only when there is no potential hazard from spray drift during dormant and active growth periods. Do not apply when conditions are conducive to spray drift from the use site to untreated areas.

After using this product, clean sprayer with soap or detergent and water, or an approved spray tank cleaner and rinse thoroughly before applying other pesticides.

### Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

### Droplet Size

Use only medium or coarser spray nozzles according to ASAE (standard 572) definition of standard nozzles or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

**Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

**Other State and Local Requirements**

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

**Equipment**

All ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the turf canopy.

**WHERE TO USE:**

SpeedZone Southern Broadleaf Herbicide for Turf provides selective broadleaf control in warm season and cool season turfgrass in five (5) use sites.

- Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways, aprons, and roughs) , and office buildings.
- Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, areas adjacent to athletic fields, and paved areas.
- Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- Agricultural site: Commercial sod production
- Non-cropland sites: including farmyards, fencerows or fence lines, highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians; Industrial sites: Lumberyards, tank farms, fuel or equipment storage areas; Municipal, state, and federal lands: Airports and military installations; railroad rights-of-ways, railroad yards, railroad crossings and railroad bridge abutments; Utility rights-of-way: telephone, pipeline, electrical power lines, and communication transmission lines.

**Prohibitions of Sites:**

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

**Turfgrass tolerance:**

- The turfgrass tolerance to this product may vary and temporary turfgrass yellowing may occur on St. Augustinegrass and certain varieties (F1) hybrids of hybrid bermudagrass. SpeedZone Southern Broadleaf Herbicide for Turf may injure certain turfgrass species. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

**Prohibitions:**

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not broadcast apply this product when ambient temperatures are above 85°F, some injury may be expected with spot treatments when air temperatures exceed 85°F. For St. Augustinegrass see Table 1 for specific temperature restrictions.

**APPLICATION SCHEDULES:**

Early postemergent applications of SpeedZone Southern Broadleaf Herbicide for Turf are recommended for annual, biennial, and perennial weeds. Apply this product to broadleaf weeds that are young and actively growing for the best results. SpeedZone Southern Broadleaf Herbicide for Turf combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

SpeedZone Southern Broadleaf Herbicide for Turf may be applied as a single broadcast application or as a follow-up broadcast application in the spring, summer, or fall. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective.

Follow-up applications as spot treatments with a minimum 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of SpeedZone Southern Broadleaf Herbicide for Turf. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to SpeedZone Southern Broadleaf Herbicide for Turf.

**For newly seeded areas:**

The application of SpeedZone Southern Broadleaf Herbicide for Turf to grass seedlings is recommended after the second mowing.

**For newly sodded, sprigged, or plugged areas:**

The application of SpeedZone Southern Broadleaf Herbicide for Turf to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

**For dormant turf:**

Applications to dormant bermudagrass, dormant zoysiagrass, and dormant bahiagrass are suggested.

**CULTURAL TIPS FOR IMPROVED CONTROL:**

**Irrigation:**

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Rainfast in 3 hours. Do not irrigate or water the turfgrass within 3 hours after application. If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.

**Mowing:**

- Delay mowing 2 days before and until 2 days after the application of this product.

**Reseeding interval:**

- Treated areas may be reseeded 1 week after application.

**HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES:**

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Do not apply more than 2 broadcast treatments per season. A minimum of 30 days is required between applications.

Use rates and spray volumes of SpeedZone Southern Broadleaf Herbicide for Turf as broadcast treatments for use on turfgrass are presented in Table 1.

<b>TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.</b>				
<b>Species</b>	<b>Amount of Product Pints/Acre</b>	<b>Recommended Spray Volume Gallons/Acre</b>	<b>Amount of Product fl.oz./1,000 sq.ft.</b>	<b>Spray Volume Gallons per 1,000 sq.ft.</b>
<b>Cool Season Turf</b>				
Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall fescue, Red or fine leaf fescues, Creeping bentgrass, Colonial bentgrass, Mixtures of cool season species established for aesthetic purposes Mixtures of cool season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass & orchardgrass)	4 to 6	3 to 220	1.5 to 2.2	0.1 to 5.0
Note: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.				

<b>TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.</b>				
<b>Species</b>	<b>Amount of Product Pints/Acre</b>	<b>Recommended Spray Volume Gallons/Acre</b>	<b>Amount of Product fl.oz./1,000 sq.ft.</b>	<b>Spray Volume Gallons per 1,000 sq.ft.</b>
<b>Warm Season Turf</b>				
Hybrid bermudagrass Bahia grass Zoysiagrass Buffalograss Centipedegrass Seashore paspalum Kikuyu grass	2 to 4	3 to 220	0.75 to 1.5	0.1 to 5.0
Common bermudagrass	3 to 5	3 to 220	1.1 to 1.8	0.1 to 5.0
NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.				

**TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.**

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl.oz./1,000 sq.ft.	Spray Volume Gallons per 1,000 sq.ft.
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<b>Warm Season Turf</b>				
<b>Common St. Augustinegrass (Excluding 'Floritam' and 'Bitterblue' varieties)</b> See Instructions Below:	1.5 to 4 During higher temperatures, lower rates within this range are recommended.	40 to 220	0.55 to 1.5 During higher temperatures, lower rates within this range are recommended.	1.0 to 5.0

- Do not apply this product to 'Floritam', 'Bitterblue' and other improved varieties of St. Augustinegrass.
- Do not broadcast or spot apply this product to St. Augustinegrass during spring green-up, which is the transition period between dormancy and active growth.
- Do not broadcast or spot apply this product to St. Augustinegrass during the fall to winter transition or if temperatures are expected to drop below 40°F within ten (10) days of application
- If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.
- Avoid mowing 2 days before and until 2 days after the application of this product.
- Over application of this product can cause turf injury (discoloration, turf thinning, stunting and even turf death).
- Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F; some injury may be expected with spot treatments when air temperatures exceed 85°F.
- Do not use tank mixture combinations, unless your experience indicates that the tank mixture will not result in turf injury.
- To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of PBI/Gordon Corporation and all risk is assumed by the buyer and/or user.

NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.

**Limitations on 2,4-D applications to ornamental turfgrass and sod farms**

Use Site	Maximum Rate per Application	Maximum Number of Applications per Year	Minimum Interval Between Applications	Minimum Spray Volume	Maximum seasonal rate
Ornamental turfgrass	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	30 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)
Sod farms	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	21 days	2 gal/A	12 pints/A (0.8 lb 2,4-D ae/A)

ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 12 pints (0.8 lb 2,4-D ae) per acre per season, excluding spot treatments.

**SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):**

- Calibration and proper application are essential when using this product.
- Over application or rates above those recommended on this labeling including excessive overlaps of this product can cause turf injury.
- Uniform applications are essential when using this product.
- Hand-held techniques: Spray wands fitted with flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the flat fan nozzle should be held stationary at the proper height. Side-to-side motions result in uneven coverage. To avoid excessive spray pattern overlaps, a spray colorant may be used.
- For cool season turfgrass, mix 1.5 to 2.2 fl.oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible.

- For warm season turfgrass other than St. Augustinegrass, mix 0.75 to 1.5 fl.oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. For St. Augustinegrass, higher spray volumes (more than 2 gallons/1,000 square feet) are recommended.
- Apply any time the emerged broadleaf weeds are susceptible.
- Do not apply more than 2 spot treatments per season. A minimum of 30 days is required between applications.
- Do not use tank mixture combinations, unless your experience indicates that the tank mixture is effective and will not result in turf injury. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

**BROADLEAF WEEDS CONTROLLED:**

This product will control or suppress the following broadleaf. Apply any time the emerged broadleaf weeds are susceptible.

BROADLEAF WEEDS			
Aster, white heath & white prairie	Dogfennel	Knotweed	Redweed
Bedstraw	Dollarweed (*pennywort)	Lambsquarters	Red sorrel (*sheep sorrel)
Beggarweed, creeping	English daisy	Lawn burweed	Shepherdspurse
Bindweed	False dandelion (*spotted catsear & common catsear)	Lespedeza, common	Spurge
Black medic	Field bindweed	Mallow, common	Thistle
Broadleaf plantain	(*morningglory & creeping jenny).	Matchweed	Veronica (*corn speedwell)
Buckhorn plantain	Field oxeye-daisy (*creeping oxeye)	Mouseear chickweed	Virginia buttonweed
Bull thistle	Filaree, whitestem & redstem	Old world diamond flower	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Burclover	Florida betony	Oxalis (*yellow woodsorrel & creeping woodsorrel)	Wild carrot
Burdock, common	Florida pusley	Parsley-piert	Wild garlic
Buttercup, creeping	Ground ivy	Pennsylvania smartweed	Wild geranium
Carpeweed	Groundsel	Pepperweed	Wild lettuce
Chickweed, common	Hawkweed	Pigweed	Wild mustard
Chicory	Healall	Pineappleweed	Wild onion
Cinquefoil	Henbit	Plantain	Wild strawberry
Clover	Innocence (Blue-eyed Mary)	Poison ivy	Wild violet
Compassplant		Poison oak	Yarrow
Curly dock		Puncturevine	Yellow rocket
Dandelion		Purple cudweed	
Dayflower		Purslane	
Deadnettle		Ragweed	
Dock			
*Synonyms			

**POSTEMERGENCE CONTROL OF GRASSY WEEDS:**

Speed Zone Broadleaf Herbicide will control or suppress specific annual grasses when applied at a rate of 4-5 pints/acre. Depending on timing of application, a second application may be needed for adequate control. If necessary, a second application may be made at the same rate, 30 days after the initial application. Speed Zone Broadleaf Herbicide works best when applied while the annual grasses are small (pre-tiller) and actively growing, but control can be obtained at all growth stages. Some biotypes may show resistance to PPO inhibiting herbicides.

Common Name	Scientific Name
Goosegrass[*]	Eleusine indica

[\*Not for use in California]

